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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,772

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Junichi Maruyama

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EXAMINER

SHAPIRO, LEONID

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,772	<b>Applicant(s)</b> MARUYAMA, JUNICHI	
	<b>Examiner</b> Leonid Shapiro	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Objections***

1. Claim 10 is objected to because of the following informalities:

Claim 10 depends on canceled claim 8.

Appropriate correction is required.

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of independent claims 9,14: " in that said control means changes, according to the number of said drive lines to be connected to said drive current source, the resistance of said scanning switch means corresponding to said scanning lines connected to said second potential to become an unselected state, **into at least two stages**" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The limitation of independent claims 9,14: " in that said control means changes, according to the number of said drive lines to be connected to said drive current source, the resistance of said scanning switch means corresponding to said scanning lines connected to said second potential to become an unselected state, into at least two stages" not described in the specification.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 9-12,14-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which

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was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The limitation of independent claims 9,14: " in that said control means changes, according to the number of said drive lines to be connected to said drive current source, the resistance of said scanning switch means corresponding to said scanning lines connected to said second potential to become an unselected state, **into at least two stages**" not described in the specification or shown in the Figures.

Claims 10-12,15 depend on claims 9,14.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-12,14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to independent claims 9,14 it is not clear how **at least two stages are selected** when **scanning lines are selected sequentially** as recited in independent claims?

Claims 10-12,15 depend on claims 9,14.

***Claim Rejections - 35 USC § 102***

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 9,13-14,16 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamaki (US 2003/0122750 A1).

As to claims 9,14 as best understood by examiner, Tamaki teaches an organic EL display device (par. 0002) comprising: a dot-matrix type organic EL panel having a plurality of scanning lines (fig. 1A, items COM1-COMn, par. 0024) and a plurality of drive lines (fig. 1A, items SEG1-SEGn, par. 0024); scanning switch means for connecting said scanning lines freely to a first potential or a second potential (figs. 1A,1C, items 180-1-180-n, pars. 0030,0032); drive switch means for connecting said drive lines freely to a drive current source or an off potential (figs. 1A,1B, items 110,150,170, par. 0031); and control means for causing said scanning switch means to connect said scanning lines to said first potential thereby to select said scanning lines sequentially (fig. 1A, items 120-160, par. 0036) and to control the connected state of said drive switch means (fig. 1A, items 110,150,170, par. 0039), characterized:

in that said control means changes, according to the number of said drive lines to be connected to said drive current source, the resistance of said scanning switch

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means corresponding to said scanning lines connected to said second potential to become an unselected state (pars. 0042-0043).

As to claim 13 Tamaki teaches an organic EL display device (par. 0002) comprising: a dot-matrix type organic EL panel having a plurality of scanning lines (fig. 1A, items COM1-COMn, par. 0024) and a plurality of drive lines (fig. 1A, items SEG1-SEGN, par. 0024); scanning switch means for connecting said scanning lines freely to a first potential or a second potential (figs. 1A,1C, items 180-1-180-n, pars. 0030,0032); drive switch means for connecting said drive lines freely to a drive current source or an off potential (figs. 1A,1B, items 110,150,170, par. 0031); and control means for causing said scanning switch means to connect said scanning lines to said first potential thereby to select said scanning lines sequentially (fig. 1A, items 120-160, par. 0036) and to control the connected state of said drive switch means (fig. 1A, items 110,150,170, par. 0039), characterized:

in that said scanning switch means includes a first transistor for connecting said scanning lines to said first potential, and a second transistor for connecting said scanning lines to said second potential (fig. 1C, items 182,183-3, par. 0032); and

in that said control means changes, according to the number of said drive lines to be connected to said drive current source, the bias voltage of said second transistor corresponding to said scanning lines connected to said second potential to become an unselected state (pars. 0042-0043).

As to claim 16 Tamaki teaches a drive method for an organic EL display device (par. 0002) comprising: connecting a plurality of scanning lines freely to a first potential

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or a second potential (figs. 1A,1C, items 180-1-180-n, pars. 0030,0032); drive switch means for connecting said drive lines individually to a drive current source or an off potential (figs. 1A,1B, items 110,150,170, par. 0031), characterized:

in that said scanning switch means includes a first transistor for connecting said scanning lines to said first potential, and a second transistor for connecting said scanning lines to said second potential (fig. 1C, items 182,183-3, par. 0032); and

in that according to the number of said drive lines to be connected to said drive current source, the bias voltage of said second transistor corresponding to said scanning lines connected to said second potential to become the unselected state (pars. 0042-0043).

As to claim 10 Tamaki teaches scanning switch means includes a first transistor for connecting said scanning lines to said first potential, and a second transistor for connecting said scanning lines to said second potential (fig. 1C, items 182,183-3, par. 0032).

As to claim 11 Tamaki teaches control means changes, according to the number of said drive lines to be connected to said drive current source, the bias voltage of said second transistor corresponding to said scanning lines connected to said second potential to become the unselected state, thereby to change said resistance (par. 0042).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 12,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamaki in view of Muruyama et al. (US 2004/0061670 A1).

Tamaki does not disclose temperature detecting means for detecting the temperature of said organic EL panel thereby to output temperature data, and said control means changes, according to the number of said drive lines to be connected to said drive current source and said temperature data, said resistance of said scanning switch means connected to said second potential.

Muruyama et al. teaches temperature detecting means for detecting the temperature of said organic EL panel thereby to output temperature data, and said control means changes, according to the number of said drive lines to be connected to said drive current source and said temperature data, said resistance of said scanning switch means connected to said second potential (fig. 1, items 2,5-6, par. 0028).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teachings of Muruyama et al. into Tamaki system in order to generate a proper drive voltage according to an ambient temperature (par. 0015 in the Muruyama et al. reference).

***Telephone inquire***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12.21.08

/L. S./

Examiner, Art Unit 2629

/Richard Hjerpe/

Supervisory Patent Examiner, Art Unit 2629